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TO: Jeffrey Parkin
Location: CM1/8E15
Art Unit: 1648
Thursday, October 09, 2003
Case Serial Number: 09889982

From: Paul Schulwitz
Location: Biotech-Chem Library
CM1-6B06
Phone: 305-1954

paul.schulwitz@uspto.gov

Search Notes

Examiner Parkin,

See attached results.

If you have any questions about this search feel free to contact me at any time.

Thank you for using STIC search services!

Paul Schulwitz
Technical Information Specialist
STIC Biotech/Chem Library
(703)305-1954

Access DB# 104717

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: JEFF PARKIN Examiner #: 72607 Date: 09/29/03
Art Unit: 1648 Phone Number 30 8-3227 Serial Number: 09/889,982
Mail Box and Bldg/Room Location: CM01/BE15 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

_____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search claim 1 and 5. The TAT protein is from HIV-1 and the basic region is set forth in Fig 1A. The oligourea backbone is set forth in Fig 1B.

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: _____	NA Sequence (#)_____	STN 252.68
Searcher Phone #: _____	AA Sequence (#)_____	Dialog _____
Searcher Location: _____	Structure (#) 1	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr. Links _____
Date Completed: 10/9	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: 30	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: 12	Other _____	Other (specify) _____

PTO-1590 (8-01)

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=> d que
L2          862 SEA FILE=HCAPLUS ABB=ON  PLU=ON  "GENE, MICROBIAL (L) TAT"+OLD/
                CT
L3         2319 SEA FILE=HCAPLUS ABB=ON  PLU=ON  "TRANSCRIPTION FACTORS (L)
                TAT"+OLD/CT
L4         2768 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2 OR L3
L13           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4 AND OLIGOUREA
L14           2 SEA FILE=REGISTRY ABB=ON  PLU=ON  ARGININE/CN
L16         155 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (ARGININE OR L14) AND L4
L17           1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16 AND (OLIGOUREA OR OLIGO
                UREA)
L18           3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L13 OR L17

=> d ibib abs hitind 1-3

L18  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:         2001:177403  HCAPLUS
DOCUMENT NUMBER:          135:28708
TITLE:                    Targeting RNA with peptidomimetic oligomers in human
                          cells
AUTHOR(S):                Tamilarasu, N.; Huq, I.; Rana, T. M.
CORPORATE SOURCE:         Department of Pharmacology, Robert Wood Johnson
                          Medical School, and Molecular Biosciences Graduate
                          Program at Rutgers State University, Piscataway, NJ,
                          08854, USA
SOURCE:                   Bioorganic & Medicinal Chemistry Letters (2001),
                          11(4), 505-507
                          CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER:                Elsevier Science Ltd.
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
AB   Replication of human immunodeficiency virus type 1 (HIV-1) requires
     specific interactions of Tat protein with the trans-activation responsive
     region (TAR) RNA, a 59-base stem-loop structure located at the 5'-end of
     all HIV mRNAs. Here we report that two TAR RNA-binding peptidomimetics,
     oligourea and oligocarbamate, inhibit transcriptional activation
     by Tat protein in human cells with an IC50 of .apprx.0.5 and 1 .mu.M,
     resp. Peptidomimetics that can target specific RNA structures provide
     novel mols. that can be used to control cellular processes involving
     protein-RNA interactions in vivo. Replication of human immunodeficiency
     virus type 1 (HIV-1) requires specific interactions of Tat protein with
     the trans-activation responsive region (TAR) RNA, a stem-loop structure
     located at the 5'-end of all HIV mRNAs. Here we report that two TAR
     RNA-binding peptidomimetics, oligourea and oligocarbamate,
     inhibit transcriptional activation by Tat protein in human cells with an
     IC50 of 0.5 and .apprx.1.0 .mu.M, resp. Peptidomimetics that can target
     specific RNA structures provide novel mols. that can be used to control
     cellular processes involving protein-RNA interactions in vivo.
CC   1-5 (Pharmacology)
IT   Transcription factors
     RL: BAC (Biological activity or effector, except adverse); BPR (Biological
     process); BSU (Biological study, unclassified); BIOL (Biological study);
     PROC (Process)
        (tat; targeting RNA with peptidomimetic oligomers in human
        cells)
```

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:513643 HCAPLUS
DOCUMENT NUMBER: 133:120053
TITLE: Tat-derived **oligourea** and its method of production and use in high affinity and specific binding of HIV-1 TAR RNA
INVENTOR(S): Rana, Tariq M.
PATENT ASSIGNEE(S): University of Medicine and Dentistry of New Jersey, USA
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000043332	A2	20000727	WO 2000-US1957	20000125
W: AU, CA, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 2000026318	A1	20000807	AU 2000-26318	20000125

PRIORITY APPLN. INFO.: US 1999-117099P P 19990125
WO 2000-US1957 W 20000125

AB This invention relates to the use of **oligourea** mols. to specifically inhibit protein-nucleic acid interactions. In particular, it provides an **oligourea** mol. that competes with the Tat protein for the TAR RNA of HIV-1. Also provided is a method specifically inhibiting protein-nucleic acid interactions, and kits.
IC ICM C07B
CC 23-20 (Aliphatic Compounds)
Section cross-reference(s): 6, 14
ST tat protein **oligourea** HIV1 TAR RNA binding
IT Genetic element
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(TAR element; tat-derived **oligourea** and method of prodn. and use in high affinity and specific binding of HIV-1 TAR RNA)
IT Viral RNA
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(TAR, of HIV-1; tat-derived **oligourea** and method of prodn. and use in high affinity and specific binding of HIV-1 TAR RNA)
IT Nucleoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(inhibition of; tat-derived **oligourea** and method of prodn. and use in high affinity and specific binding of HIV-1 TAR RNA)
IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(nucleic acid-binding, side chains of, use in **oligourea**; tat-derived **oligourea** and method of prodn. and use in high affinity and specific binding of HIV-1 TAR RNA)

IT Polyureas
Polyureas
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(polyamide-; tat-derived **oligourea** and method of prodn. and use in high affinity and specific binding of HIV-1 TAR RNA)

IT Polyamides, preparation
Polyamides, preparation
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(polyurea-; tat-derived **oligourea** and method of prodn. and use in high affinity and specific binding of HIV-1 TAR RNA)

IT Human immunodeficiency virus 1
Peptidomimetics
Protein sequences
Test kits
(tat-derived **oligourea** and method of prodn. and use in high affinity and specific binding of HIV-1 TAR RNA)

IT **Transcription factors**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(**tat**; **tat**-derived **oligourea** and method of prodn. and use in high affinity and specific binding of HIV-1 TAR RNA)

IT 253141-50-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(tat-derived **oligourea** and method of prodn. and use in high affinity and specific binding of HIV-1 TAR RNA)

L18 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:75995 HCAPLUS
DOCUMENT NUMBER: 130:291111
TITLE: High Affinity and Specific Binding of HIV-1 TAR RNA by a Tat-Derived **Oligourea**
AUTHOR(S): Tamilarasu, N.; Huq, Ikramul; Rana, Tariq M.
CORPORATE SOURCE: Department of Pharmacology, Robert Wood Johnson Medical School, Piscataway, NJ, 08854, USA
SOURCE: Journal of the American Chemical Society (1999), 121(7), 1597-1598
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB An **oligourea** contg. the basic **arginine**-rich region of the Tat protein was synthesized and shown to specifically recognize TAR RNA. **Oligourea**-RNA interactions and stability of the **oligourea** to proteolysis were detd.

CC 1-5 (Pharmacology)
ST HIV1 TAR RNA **oligourea** binding
IT Genetic element
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(TAR element; binding of HIV-1 TAR RNA by a Tat-derived **oligourea**)

IT Human immunodeficiency virus 1
(binding of HIV-1 TAR RNA by a Tat-derived **oligourea**)

IT **Transcription factors**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(**tat**; binding of HIV-1 TAR RNA by a **Tat**-derived **oligourea**)

IT 223273-18-5P
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(binding of HIV-1 TAR RNA by a Tat-derived **oligourea**)

IT 191936-91-1
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(binding of HIV-1 TAR RNA by a Tat-derived **oligourea** and comparison with Tat-derived peptide)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> d que
L1          1317 SEA FILE=REGISTRY ABB=ON  PLU=ON  GRKKRRQRRR/SQSP
L8               STR

                 12                  13
                  O                   O
                  ‖                   ‖
NH~CH~CH2~NH~C~~NH~CH~CH2~NH~C~~NH
1   2   3   4   5   6   7   8   9  10  11

NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  13

STEREO ATTRIBUTES: NONE
L10           41 SEA FILE=REGISTRY SSS FUL L8
L12            2 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND L10

=> d ibib abs ind hitseq hitstr 1-2

L12  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:         2001:265375  HCAPLUS
DOCUMENT NUMBER:          134:311431
TITLE:                    Preparation of novel amino acid-related carbamates and
                          ureas
INVENTOR(S):              Rana, Tariq M.; Hwang, Seongwoo; Tamilarasu, Natarajan
PATENT ASSIGNEE(S):       University of Medicine and Dentistry of New Jersey,
                          USA
SOURCE:                   PCT Int. Appl., 117 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.   DATE
     ----------------  ----  --------      ----------------  --------
     WO 2001025188      A1   20010412      WO 2000-US27398   20001004
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6420591         B1   20020716      US 2000-679728    20001004
     EP 1226115         A1   20020731      EP 2000-968691    20001004
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
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US 6503713	B1	20030107	US 2000-679451		20001004
JP 2003511362	T2	20030325	JP 2001-528136		20001004
US 6583309	B1	20030624	US 2002-151800		20020521
US 2003153523	A1	20030814	US 2002-295761		20021115
PRIORITY APPLN. INFO.:			US 1999-157646P	P	19991004
			US 2000-679451	A1	20001004
			US 2000-679728	A3	20001004
			WO 2000-US27398	W	20001004

OTHER SOURCE(S): MARPAT 134:311431

AB Novel carbamates and ureas H-Y-Y-Y-NH2 [each Y is independently a radical NHC*H[(CH2)mR1]CO, N[(CH2)mR1]CH2CO, or NHC*H[(CH2)mR1]CH2O2C (Q), where each R1 is independently selected from -NH2, -NHC(:NH)NH2, and -CH2C(:NH)NH2; each m is independently an integer 3-7; each * is an (R) or (S) chiral center; and with the proviso that at least one Y is a radical having the structure of Q] and their pharmaceutically acceptable salts were prepd. for treating or preventing cancer, inflammation, or a viral infection. Thus, H2NCONHCH[(CH2)3NHC(:NH)NH2]CH2NHCONHCH[(CH2)4NH2]CH2NHCONHCH[(CH2)4NH2]CH2NH2, with the chirality of arginine and lysine, was prepd. and showed Ki = 50 nM for binding to HIV TAR RNA.

IC ICM C07C261-00
ICS C07C275-00

CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 1, 15

ST amino acid carbamate urea prepn antitumor antiinflammatory virucide

IT Hepatitis
(A; prepn. of amino acid-related carbamates and ureas)

IT Hepatitis
(B; prepn. of amino acid-related carbamates and ureas)

IT Hepatitis
(C; prepn. of amino acid-related carbamates and ureas)

IT Sarcoma
(Kaposi's; prepn. of amino acid-related carbamates and ureas)

IT RNA
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(TAR; prepn. of amino acid-related carbamates and ureas)

IT Lymphoproliferative disorders
(Waldenstrom's macroglobulinemia; prepn. of amino acid-related carbamates and ureas)

IT Leukemia
(acute lymphocytic; prepn. of amino acid-related carbamates and ureas)

IT Leukemia
(acute myelogenous; prepn. of amino acid-related carbamates and ureas)

IT Leukemia
Respiratory distress syndrome
(acute; prepn. of amino acid-related carbamates and ureas)

IT Carcinoma
(adenocarcinoma; prepn. of amino acid-related carbamates and ureas)

IT Astrocyte
(astrocytoma; prepn. of amino acid-related carbamates and ureas)

IT Skin, neoplasm
(basal cell carcinoma; prepn. of amino acid-related carbamates and ureas)

IT Biliary tract
(bile duct, carcinoma; prepn. of amino acid-related carbamates and ureas)

IT Bladder

Lung, neoplasm
(carcinoma; prepn. of amino acid-related carbamates and ureas)
IT Musculoskeletal diseases
(cartilage chondrosarcoma; prepn. of amino acid-related carbamates and ureas)
IT Cartilage
(chondrosarcoma; prepn. of amino acid-related carbamates and ureas)
IT Notochord
(chordoma; prepn. of amino acid-related carbamates and ureas)
IT Chorion
(choriocarcinoma; prepn. of amino acid-related carbamates and ureas)
IT Leukemia
(chronic lymphocytic; prepn. of amino acid-related carbamates and ureas)
IT Leukemia
(chronic; prepn. of amino acid-related carbamates and ureas)
IT Intestine, neoplasm
(colon, carcinoma; prepn. of amino acid-related carbamates and ureas)
IT Brain, neoplasm
(ependymoma; prepn. of amino acid-related carbamates and ureas)
IT Leukemia
(erythroleukemia; prepn. of amino acid-related carbamates and ureas)
IT Sarcoma
(fibrosarcoma; prepn. of amino acid-related carbamates and ureas)
IT Neuroglia
(glioma; prepn. of amino acid-related carbamates and ureas)
IT Blood vessel, neoplasm
(hemangioblastoma; prepn. of amino acid-related carbamates and ureas)
IT Blood vessel, neoplasm
(hemangiosarcoma; prepn. of amino acid-related carbamates and ureas)
IT Liver, neoplasm
(hepatoma; prepn. of amino acid-related carbamates and ureas)
IT Intestine, disease
(inflammatory; prepn. of amino acid-related carbamates and ureas)
IT Reperfusion
(injury; prepn. of amino acid-related carbamates and ureas)
IT Adipose tissue, neoplasm
(liposarcoma; prepn. of amino acid-related carbamates and ureas)
IT Brain, neoplasm
(medulloblastoma; prepn. of amino acid-related carbamates and ureas)
IT Meninges
(meningioma; prepn. of amino acid-related carbamates and ureas)
IT Mesothelium
(mesothelioma; prepn. of amino acid-related carbamates and ureas)
IT Leukemia
(myelogenous; prepn. of amino acid-related carbamates and ureas)
IT Mammary gland
Prostate gland
(neoplasm; prepn. of amino acid-related carbamates and ureas)
IT Oligodendrocyte
(oligodendroglioma; prepn. of amino acid-related carbamates and ureas)
IT Bone, neoplasm
(osteosarcoma; prepn. of amino acid-related carbamates and ureas)
IT AIDS (disease)
Anti-inflammatory agents
Antitumor agents
Antiviral agents

Asthma
Carcinoma
Eczema
Hodgkin's disease
Human T-lymphotropic virus 1
Human immunodeficiency virus 1
Human immunodeficiency virus 2
Human poliovirus
Influenza virus
Leukemia
Lymphoma
Measles virus
Melanoma
Multiple myeloma
Ovary, neoplasm
Pancreas, neoplasm
Polycythemia vera
Psoriasis
Rabies virus
Rheumatoid arthritis
Rotavirus
Sarcoma
Testis, neoplasm
Uterus, neoplasm
(prepn. of amino acid-related carbamates and ureas)

IT Amino acids, preparation
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of amino acid-related carbamates and ureas)

IT Kidney, neoplasm
(renal cell carcinoma; prepn. of amino acid-related carbamates and ureas)

IT Lung, neoplasm
(small-cell carcinoma; prepn. of amino acid-related carbamates and ureas)

IT Carcinoma
(squamous cell; prepn. of amino acid-related carbamates and ureas)

IT Intestine, disease
(ulcerative colitis; prepn. of amino acid-related carbamates and ureas)

IT 334000-12-3P 334000-13-4P 334000-14-5P 334000-15-6P 334000-16-7P
334000-17-8P 334000-18-9P 334000-19-0P 334000-20-3P 334000-21-4P
334000-22-5P 334000-23-6P 334000-24-7P 334000-25-8P 334000-26-9P
334000-27-0P 334000-28-1P 334000-29-2P 334000-30-5P 334000-31-6P
334000-32-7P 334000-33-8P 334000-34-9P 334000-35-0P 334000-36-1P
334000-37-2P 334000-38-3P 334000-39-4P 334000-40-7P 334000-41-8P
334000-42-9P 334000-43-0P 334000-44-1P 334000-45-2P 334000-46-3P
334000-47-4P 334000-48-5P 334000-49-6P 334000-50-9P 334000-51-0P
334000-52-1P 334000-53-2P 334000-54-3P 334000-55-4P 334000-56-5P
334000-57-6P 334000-58-7P 334000-59-8P 334000-60-1P 334000-61-2P
334000-62-3P 334000-63-4P 334000-64-5P 334000-65-6P 334000-66-7P
334000-67-8P 334000-68-9P 334000-69-0P 334000-70-3P 334000-71-4P
334000-72-5P 334000-73-6P 334000-74-7P 334000-75-8P 334000-76-9P
334000-77-0P 334000-78-1P 334000-79-2P 334000-80-5P 334000-81-6P
334000-82-7P 334000-83-8P 334000-84-9P 334000-85-0P 334000-86-1P
334000-87-2P 334000-88-3P 334000-89-4P 334000-90-7P 334000-91-8P
334000-92-9P 334000-93-0P 334000-94-1P 334000-95-2P 334000-96-3P

334000-97-4P 334000-98-5P 334000-99-6P 334001-00-2P 334001-01-3P
334001-02-4P 334001-03-5P 334001-04-6P 334001-05-7P 334001-06-8P
334001-07-9P 334001-08-0P 334001-09-1P **334001-10-4P**
334001-11-5P 334001-12-6P 334001-13-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of amino acid-related carbamates and ureas)

IT 79-08-3, Bromoacetic acid 29022-11-5, Fmoc gly oh 68076-36-8
71989-20-3 80149-80-0 91000-69-0 92954-90-0 105047-45-8
121343-82-6 181767-66-8 334001-23-9 334001-24-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of amino acid-related carbamates and ureas)

IT 181757-41-5P 334001-14-8P 334001-15-9P 334001-16-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of amino acid-related carbamates and ureas)

IT 334001-17-1P 334001-18-2P 334001-19-3P 334001-20-6P 334001-21-7P
334001-22-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of amino acid-related carbamates and ureas)

IT 111518-02-6 172077-28-0 334838-50-5
RL: PRP (Properties)
(unclaimed nucleotide sequence; prepn. of novel amino acid-related carbamates and ureas)

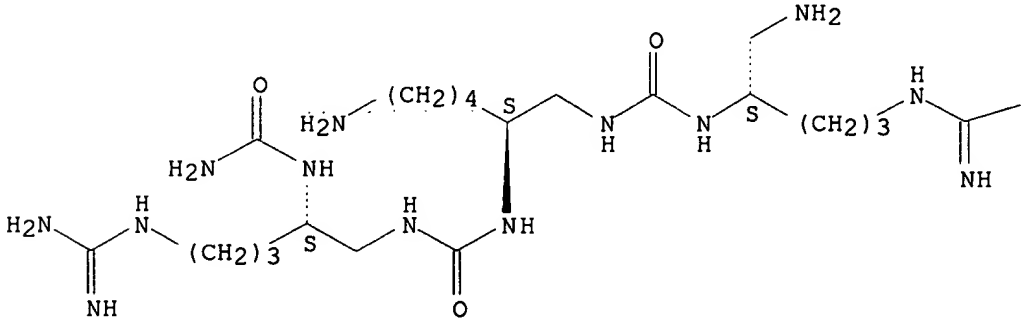
IT **253141-50-3**
RL: PRP (Properties)
(unclaimed sequence; prepn. of novel amino acid-related carbamates and ureas)

IT **334001-10-4P 334001-11-5P 334001-12-6P**
334001-13-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of amino acid-related carbamates and ureas)

RN 334001-10-4 HCAPLUS
CN 2,5,7,10-Tetraazaundecanediamide, 8-(4-aminobutyl)-N11-[(1S)-4-[(aminoiminomethyl)amino]-1-(aminomethyl)butyl]-3-[3-[(aminoiminomethyl)amino]propyl]-6-oxo-, (3S,8S)- (9CI) (CA INDEX NAME)

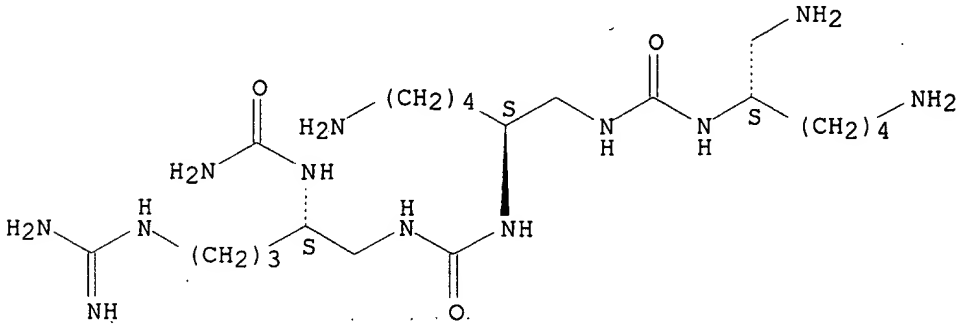
Absolute stereochemistry.

PAGE 1-A



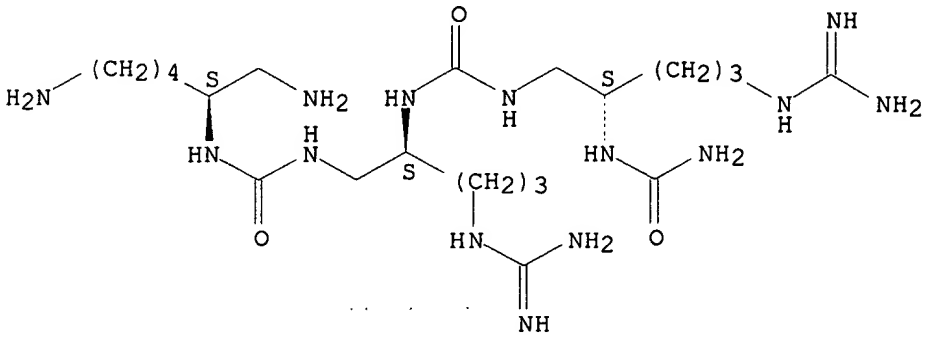
RN 334001-11-5 HCAPLUS
CN 2,5,7,10-Tetraazaundecanediamide, N11-[(1S)-5-amino-1-(aminomethyl)pentyl]-8-(4-aminobutyl)-3-[3-[(aminoiminomethyl)amino]propyl]-6-oxo-, (3S,8S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



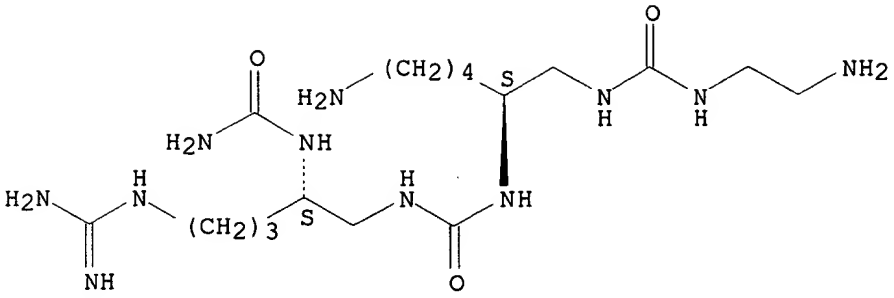
RN 334001-12-6 HCAPLUS
CN 2,5,7,10-Tetraazaundecanediamide, N11-[(1S)-5-amino-1-(aminomethyl)pentyl]-3,8-bis[3-[(aminoiminomethyl)amino]propyl]-6-oxo-, (3S,8S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 334001-13-7 HCAPLUS
CN 2,5,7,10-Tetraazaundecanediamide, 8-(4-aminobutyl)-N11-(2-aminoethyl)-3-[3-[(aminoiminomethyl)amino]propyl]-6-oxo-, (3S,8S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **253141-50-3**
RL: PRP (Properties)
(unclaimed sequence; prepn. of novel amino acid-related carbamates and ureas)
RN 253141-50-3 HCAPLUS
CN L-Arginine, glycyl-L-arginyl-L-lysyl-L-lysyl-L-arginyl-L-arginyl-L-glutaminyl-L-arginyl-L-arginyl- (9CI) (CA INDEX NAME)

SEQ 1 GRKKRRQRRR

Absolute stereochemistry.

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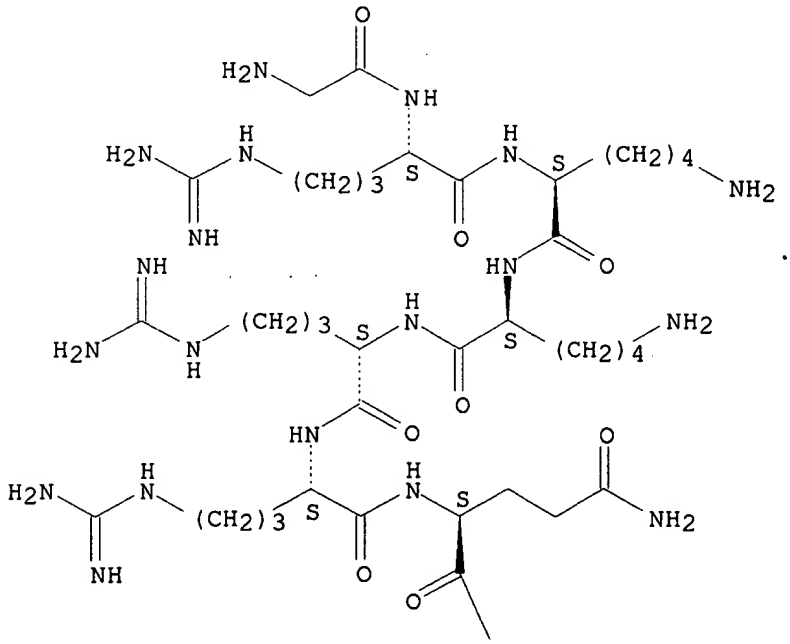

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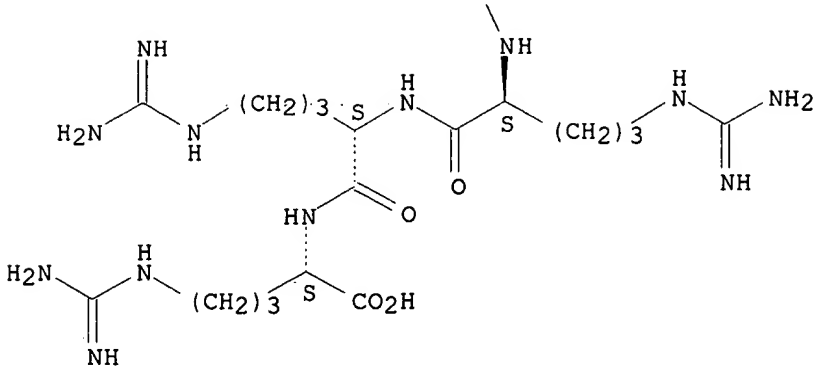
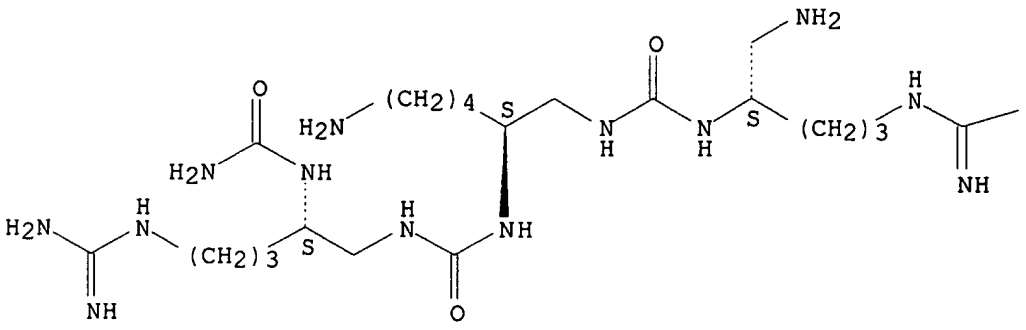


IT INDEXING IN PROGRESS
IT **334001-10-4P 334001-11-5P 334001-12-6P**
334001-13-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of amino acid-related carbamates and ureas)
RN 334001-10-4 HCAPLUS
CN 2,5,7,10-Tetraazaundecanediamide, 8-(4-aminobutyl)-N11-[(1S)-4-[(aminoiminomethyl)amino]-1-(aminomethyl)butyl]-3-[3-[(aminoiminomethyl)amino]propyl]-6-oxo-, (3S,8S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

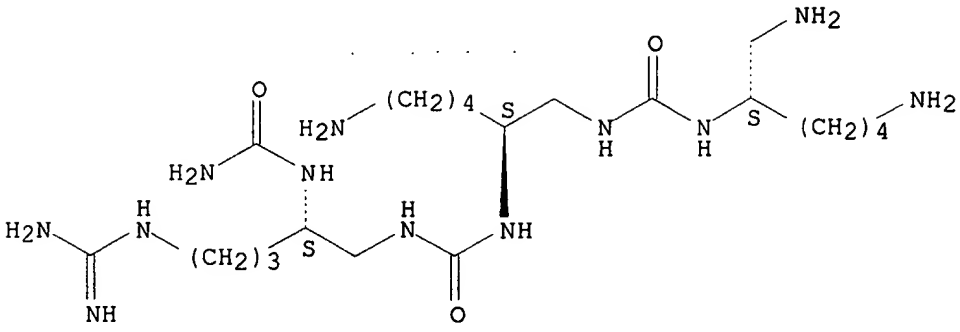


PAGE 1-B

RN 334001-11-5 HCAPLUS
CN 2,5,7,10-Tetraazaundecanediamide, N11-[(1S)-5-amino-1-(aminomethyl)pentyl]-8-(4-aminobutyl)-3-[3-[(aminoiminomethyl)amino]propyl]-6-oxo-, (3S,8S)-

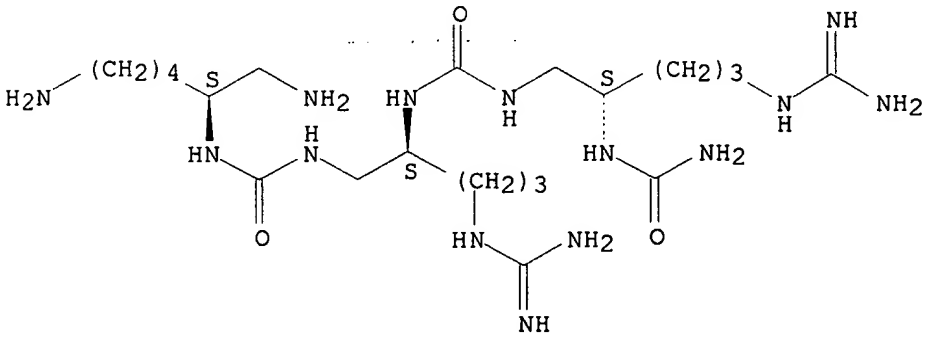
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



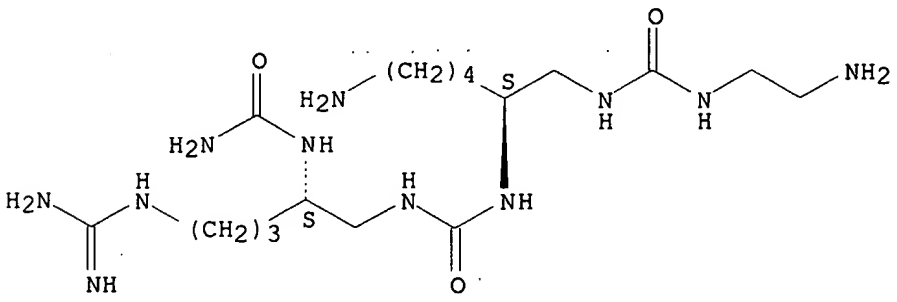
RN 334001-12-6 HCAPLUS
CN 2,5,7,10-Tetraazaundecanediamide, N11-[(1S)-5-amino-1-(aminomethyl)pentyl]-3,8-bis[3-[(aminoiminomethyl)amino]propyl]-6-oxo-, (3S,8S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 334001-13-7 HCAPLUS
CN 2,5,7,10-Tetraazaundecanediamide, 8-(4-aminobutyl)-N11-(2-aminoethyl)-3-[3-[(aminoiminomethyl)amino]propyl]-6-oxo-, (3S,8S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **253141-50-3**

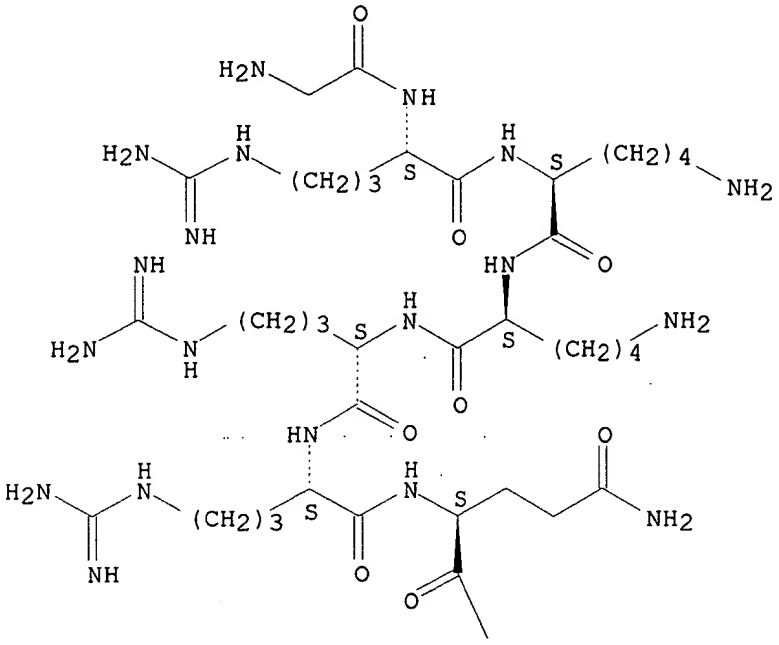
RL: PRP (Properties)
(unclaimed sequence; prepn. of novel amino acid-related carbamates and ureas)

RN 253141-50-3 HCAPLUS

CN L-Arginine, glycyl-L-arginyl-L-lysyl-L-lysyl-L-arginyl-L-arginyl-L-glutaminyl-L-arginyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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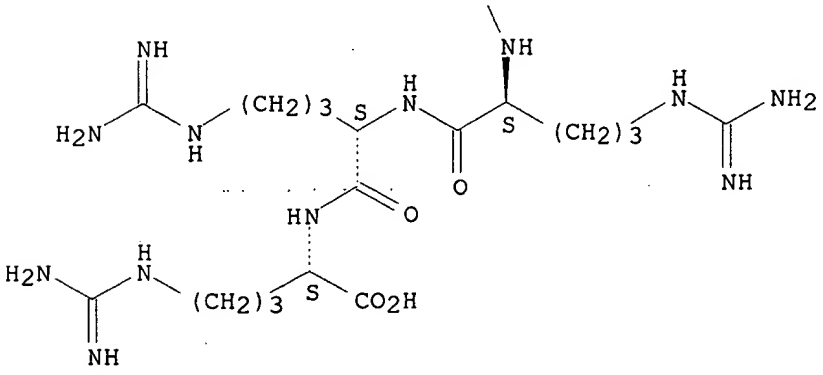
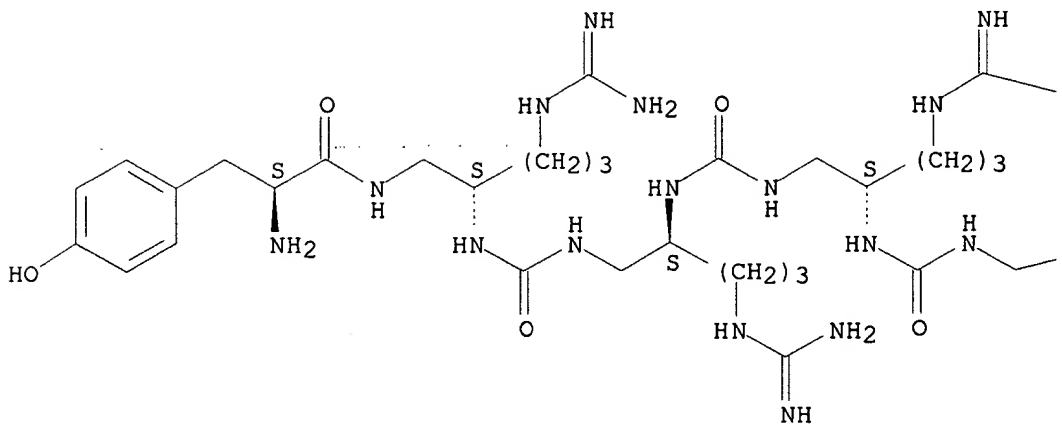


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:75995 HCAPLUS
DOCUMENT NUMBER: 130:291111
TITLE: High Affinity and Specific Binding of HIV-1 TAR RNA by a Tat-Derived Oligourea
AUTHOR(S): Tamilarasu, N.; Huq, Ikramul; Rana, Tariq M.
CORPORATE SOURCE: Department of Pharmacology, Robert Wood Johnson Medical School, Piscataway, NJ, 08854, USA
SOURCE: Journal of the American Chemical Society (1999), 121(7), 1597-1598
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB An oligourea contg. the basic arginine-rich region of the Tat protein was synthesized and shown to specifically recognize TAR RNA. Oligourea-RNA interactions and stability of the oligourea to proteolysis were detd.
CC 1-5 (Pharmacology)
ST HIV1 TAR RNA oligourea binding
IT Genetic element
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(TAR element; binding of HIV-1 TAR RNA by a Tat-derived oligourea)
IT Human immunodeficiency virus 1
(binding of HIV-1 TAR RNA by a Tat-derived oligourea)
IT Transcription factors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(tat; binding of HIV-1 TAR RNA by a Tat-derived oligourea)
IT **223273-18-5P**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(binding of HIV-1 TAR RNA by a Tat-derived oligourea)
IT **191936-91-1**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(binding of HIV-1 TAR RNA by a Tat-derived oligourea and comparison with Tat-derived peptide)
IT **223273-18-5P**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(binding of HIV-1 TAR RNA by a Tat-derived oligourea)
RN 223273-18-5 HCAPLUS
CN 2,5,7,10,12,15,17,20,22,25,27,30,32,35,37,40,42,45-Octadecaazahexatetracontanediamide, 29,34-bis(4-aminobutyl)-N1-[(1S)-1-[[[(2S)-2-amino-3-(4-hydroxyphenyl)-1-oxopropyl]amino]methyl]-4-[(aminoiminomethyl)amino]butyl]-4,9,19,24,39-pentakis[3-[(aminoiminomethyl)amino]propyl]-14-(3-amino-3-oxopropyl)-6,11,16,21,26,31,36,41-octaoxo-, (4S,9S,14S,19S,24S,29S,34S,39S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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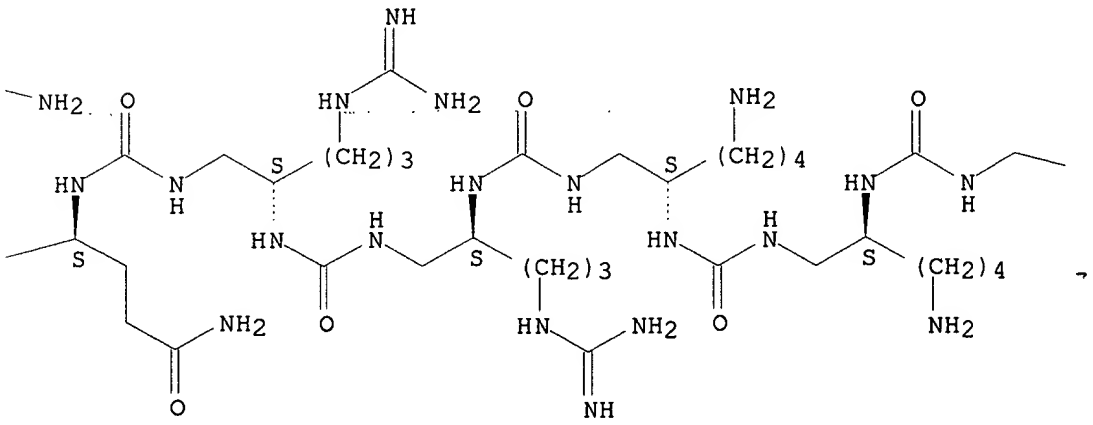
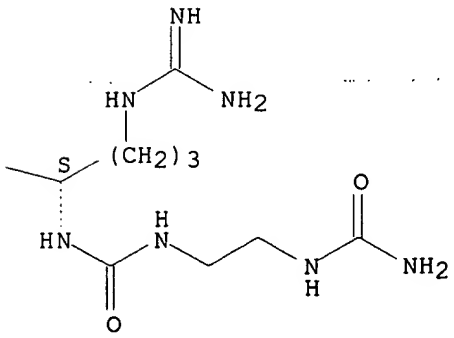


PAGE 1-C

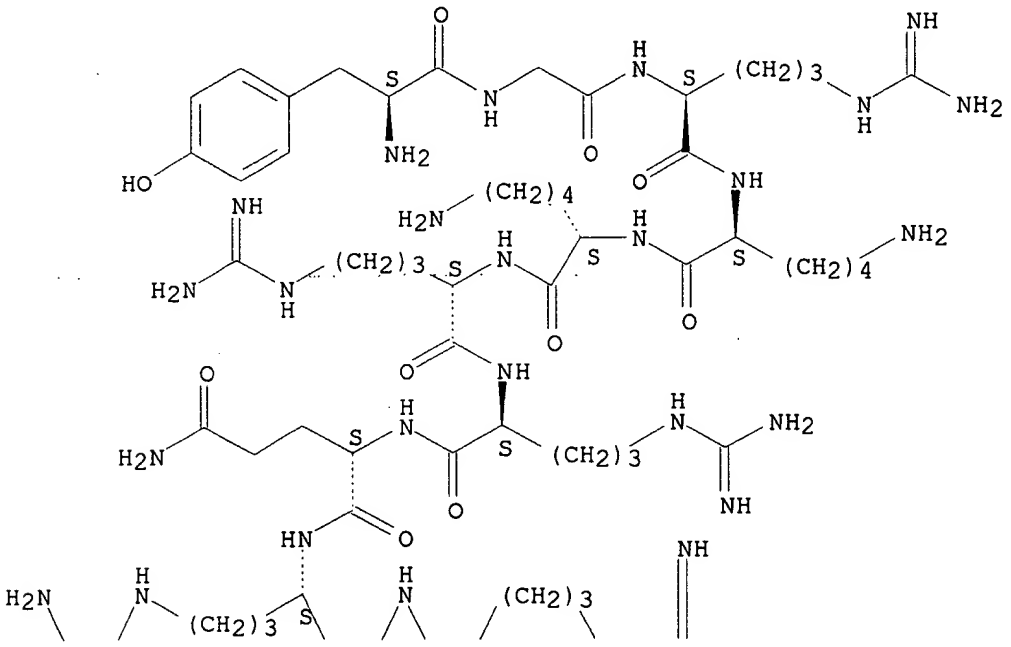


IT **191936-91-1**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(binding of HIV-1 TAR RNA by a Tat-derived oligourea and comparison with Tat-derived peptide)
RN 191936-91-1 HCAPLUS
CN L-Arginine, L-tyrosylglycyl-L-arginyl-L-lysyl-L-lysyl-L-arginyl-L-arginyl-L-glutaminyl-L-arginyl-L-arginyl- (9CI) (CA INDEX NAME)

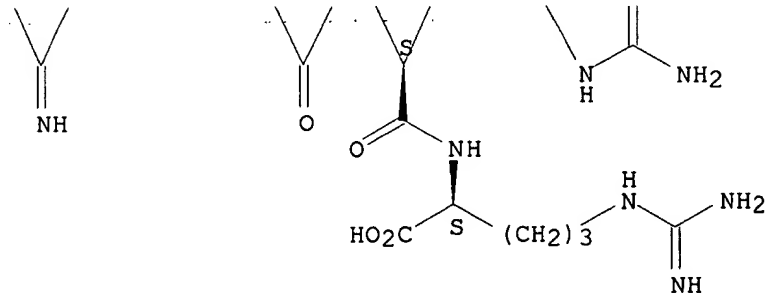
SEQ 1 YGRKKRRQRR R

Absolute stereochemistry.

PAGE 1-A



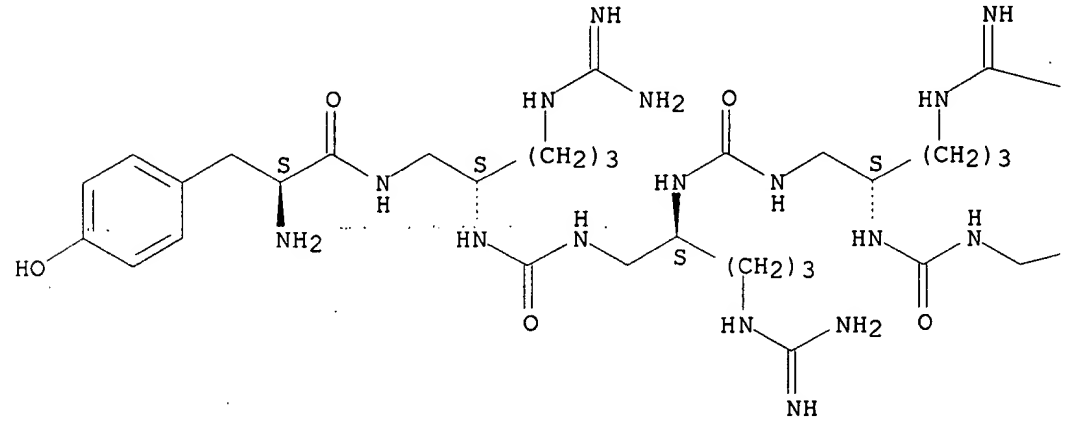
PAGE 2-A



IT INDEXING IN PROGRESS
IT **223273-18-5P**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(binding of HIV-1 TAR RNA by a Tat-derived oligourea)
RN 223273-18-5 HCAPLUS
CN 2,5,7,10,12,15,17,20,22,25,27,30,32,35,37,40,42,45-Octadecaazahexatetracontanediamide, 29,34-bis(4-aminobutyl)-N1-[(1S)-1-[[[(2S)-2-amino-3-(4-hydroxyphenyl)-1-oxopropyl]amino]methyl]-4-[(aminoiminomethyl)amino]butyl]-4,9,19,24,39-pentakis[3-[(aminoiminomethyl)amino]propyl]-14-(3-amino-3-oxopropyl)-6,11,16,21,26,31,36,41-octaoxo-, (4S,9S,14S,19S,24S,29S,34S,39S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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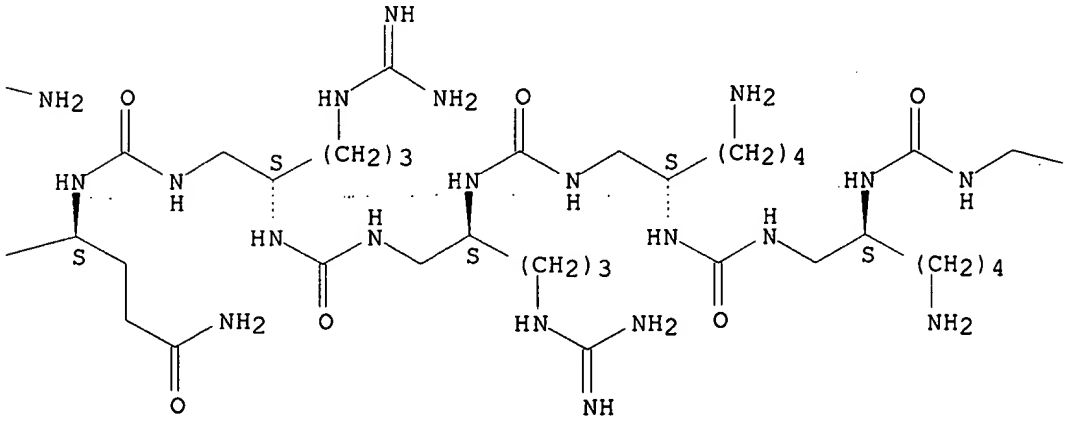
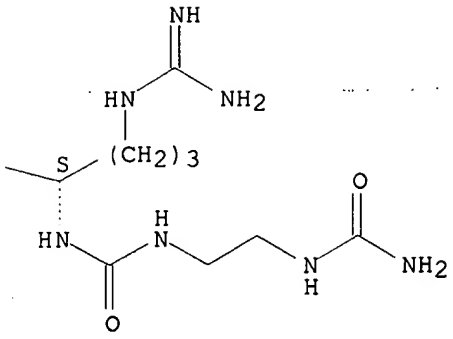


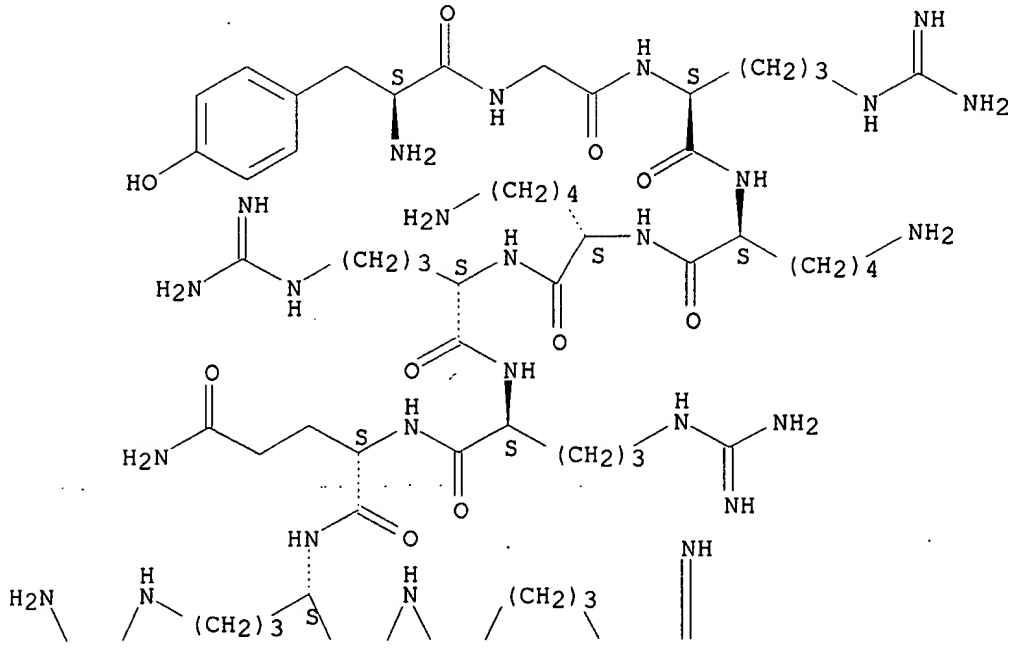
PAGE 1-C

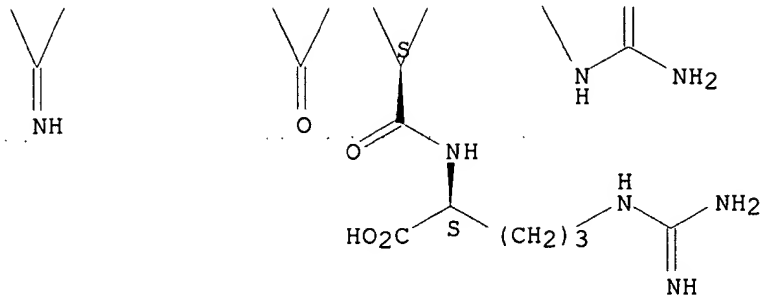


IT **191936-91-1**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(binding of HIV-1 TAR RNA by a Tat-derived oligourea and comparison with Tat-derived peptide)
RN 191936-91-1 HCAPLUS
CN L-Arginine, L-tyrosylglycyl-L-arginyl-L-lysyl-L-lysyl-L-arginyl-L-arginyl-L-glutaminyl-L-arginyl-L-arginyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT